NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

RECREATION TRAIL AND WALKWAY (feet) CODE 568

DEFINITION

A pathway prepared especially for pedestrian, equestrian, and cycle travel.

PURPOSES

This practice may be applied as part of a resource management system to support one or more of the following:

- To provide users of recreation areas with travel routed for activities such as walking, sightseeing, horseback riding, and bicycling
- ☐ To prevent erosion on or along pathways
- To preserve and protect soil, plant, animal, and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to walkways and trails constructed in recreation and scenic areas, where prepared paths, trails, and walkways are needed for effective and safe use of the recreation resources.

CRITERIA

Visual resources

Special attention shall be given to saving and maintaining key trees and other vegetation that have scenic value, provide shade, reduce erosion and runoff, provide den and food for wildlife, or add to the visual quality of the area.

Grade

Sustained grades shall be dictated by good judgment for the purpose intended, considering the topography, and shall not exceed 10 percent.

Width

Minimum tread width shall be 4 feet for unobstructed walkways. The width in cuts for pedestrian walkways on side hill sections can be reduced to 3 ft if greater width would increase the cost materially or adversely affect the visual resources.

Equestrian trails can vary from specific grades, widths, and clearing requirements if so dictated by location and topography.

Side slopes

Cut and fill slopes shall be stable for soil material used. Minimum side slopes shall be 2:1. Where vegetation is maintained by mowing slopes shall be 3:1 or flatter.

Drainage

Adequate drainage shall be provided. A raised or elevated trail or walkway may be required for wet sites that cannot be drained.

Erosion control

Plans shall include provisions for control of erosion. Distributed areas shall be established to vegetation as soon as practicable after construction. Temporary vegetation shall be used until permanent vegetation can be established. If soil or climatic conditions precludes the use of vegetation, non-vegetative means, such as

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mulches, aggregate, and erosion control matting can be used. Seedbed preparation, seeding, fertilizing, and mulching shall comply with criteria for Critical Area Planting (Code 342).

Bridges and raised walkways

Bridges and raised walkways shall be designed for the maximum expected loading with an adequate factor of safety. Minimum live load for personnel shall be 200 pounds per square foot.

Raised walkways can be used to support personnel across water or swampy areas. Typically they consist of a wood or metal treadway supported by wood stringers on posts set in the ground.

Surfacing

Surfacing material shall be 3/4" minus crushed aggregate, cinders, concrete, asphalt, course bark or wood chips, or bark dust. If crushed aggregate is unavailable, or transportation of such is not economical. Pit or creek-run gravel, aggregate or other material that will provide required trafficability, protection from erosion, and surface drainage can be used.

Safety

Due consideration shall be given to safety of personnel. Protection from slides and falling rocks shall be provided, if needed. Adequate directional and warning signs, handrails, bridges, and culverts shall be placed as dictated by the site and intended use.

CONSIDERATIONS

Water Quantity

- 1. Impacts of impervious walkways and trails on increased surface runoff.
- Changes in deep percolation with increased surface runoff. Consider evaporation losses before infiltration, evapotranspiration changes with decreased infiltration, and average changes in root zone storage.

Water Quality

 Change in ground water quality caused by decreased dissolved chemical infiltration (if chemicals are used) or increased soluble nitrogen from manure leachate.

- 2. Potential changes in erosion and sediment yield caused by increase runoff and temporary increases in erosion during construction.
- 3. Effects of dissolved chemicals in runoff resulting from recreation activities.

PLANS AND SPECIFICATIONS

Plans and specifications for constructing recreation trails and walkways shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

OPERATION AND MAINTENANCE

An Operation and Maintenance plan must be prepared for use by the landowner or operator responsible for recreation trail and walkway operation and maintenance. The plan should provide specific instructions for operating and maintaining trails and walkways to insure they function properly. Minimum requirements to be addressed in the Operation and Maintenance Plan are:

- 1. Prompt repair or replacement of damaged components is necessary.
- 2. Repair eroded areas and revegetate as soon as possible. Install erosion control measures, as needed, to stabilize the area.
- 3. Repair or replace trail and pathway surface materials, as necessary.
- 4. Remove debris and liter from trails and pathway surfaces, adjoining land areas, ditches and drainage facilities.
- 5. Maintain drainage facility capacities.
- 6. Maintain good vegetative cover on all slopes and watercourses.

List items specific to this project on the Operation and Maintenance Worksheet.

REFERENCES

USDA NRCS, National Engineering Handbook, Part 634 Hydraulic Engineering.

USDA NRCS, National Engineering Field Handbook.

USDA NRCS, Standard Drawings Handbook - Washington.